

ENERGY CONSERVATION APPLICATION FORM FOR LOW-RISE RESIDENTIAL NEW
CONSTRUCTION and ADDITIONS
780 CMR Appendix J

Applicant Name: _____
Applicant Address: _____

Applicant Phone: _____

Site Address: _____
City/Town: _____
Use Group: _____
Date of Application: _____
Applicant Signature: _____

Compliance Path (check one):

☐ **Prescriptive Package (Limited to 1- or – 2-family wood frame buildings heated with fossil fuels only)**

Package (A through KK from Table J5.2.1b): _____ Heating Degree Days (HDD₆₅) from Table J5.2.1 a: _____

(For items d. through i., fill in all values that apply from Table J5.2.1b)

a. Gross Wall Area	_____ sq. ft.	f. Wall R-value	R-_____.
b. Glazing Area ¹	_____ sq. ft.	g. Floor R-value	R-_____.
c. Glazing % (100 x b ÷ a)	_____ %	h. Basement wall	R-_____.
d. Glazing U-value	U-_____.	i. Slab Perimeter	R-_____.
e. Ceiling R-value	R-_____.	j. Heating AFUE	_____.

☐ **Component Performance: “Manual Trade-Off” (Limited to wood or metal framed buildings only)**

Climate Zone (from Figure J6.2.2) ☐ Zone 12 ☐ Zone 13 ☐ Zone 14

Attach *Trade-Off Worksheet* from Appendix J, [and *HVAC Trade-Off Worksheet*, if applicable]

☐ **MAScheck Software**

Attach *Compliance Report* and *Inspection Checklist* printouts

☐ **Home Energy Rating System Evaluation**

Attach *Home Energy Rating Certificate* (HERS rating score must be 83 or higher)

☐ **Systems Analysis** OR ☐ **Renewable Energy Sources**

Attach *Mass. Registered Architect or Engineer Analysis*

ALTERNATIVE FOR ADDITIONS ONLY:

a. Gross Wall + Ceiling Area _____ sq. ft. b. Glazing Area ¹ _____ sq. ft. c. Glazing % (100 x b ÷ a) _____

☐ **ADDITION WITH Glazing % (c.) up to 40%** may use 780 CMR Table J1.1.2.3.1 below:

MAXIMUM U-value	MINIMUM R-Values				
Fenestration ²	Ceiling ³	Wall	Floor	Basement Wall	Slab Perimeter, Depth
0.39 ²	R-37	R-13	R-19	R-10	R-10, 4 ft.

¹ Glazing Area may be either Rough Opening or Unit dimensions.

² Based on NFRC listing. Applies either to every unit, or to area-weighted average of all units.

³ R-30 ceiling insulation may be used in place of R-37 if the insulation achieves the full R-value over the entire ceiling area (i.e. – not compressed over exterior walls, and including any access openings.)

Official's Name: _____ Official's Signature: _____

Application Approved ☐ Denied ☐ Date of Approval/Denial: _____

Reason(s) for Denial: (provide additional details as needed on back side)

J1.1.2.3.1 Additions to existing buildings:

Additions to existing buildings or structures shall comply with one of the applicable criteria below:

1. The new addition, by itself, shall conform to the applicable provisions of Appendix J, or;
2. The new addition plus the existing building/dwelling unit may be considered together to ensure compliance with all applicable provisions of Appendix J, **or**;
3. Additions that are open to or separated by an exterior wall from the existing house/dwelling unit shall meet the prescriptive envelope component criteria of Table J1.1.2.3.1. The total area (rough opening or unit dimensions) of glazed fenestration products (windows, skylight, and glazed portion of doors) shall not exceed 40% of the gross wall and gross ceiling area of the addition combined. If any individual fenestration component exceeds the maximum U-value listed in Table J1.1.2.3.1, then the area-weighted average U-value for all fenestration components must be less than or equal to the listed value. The R-value requirements for opaque thermal envelope components indicate insulation products (cavity and/or insulating sheathing), and shall be equal to or exceed the applicable listed values found in Table J1.1.2.3.1. If such additions are separated from the main house by a wall and are conditioned, then a readily accessible manual or automatic means shall be provided to partially restrict or shut off the heating and/or cooling input to the addition space. That portion of a wall that separates the addition from the existing building/dwelling unit, if an existing exterior wall, shall be allowed to remain and neither that portion of said wall or any fenestration within said portion of wall common to the addition need comply with the thermal envelope requirements of Appendix J.